

AMENDMENTS TO THE DRAWINGS:

The attached replacement drawing sheet includes changes to Figure 11. This sheet replaces the originally filed Figures 10 and 11.

REMARKS

The Office Action dated July 28, 2006, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto.

Claims 1, 3, and 6 – 15 are present for examination, with Claims 9, 11, 12, 14, and 15 being withdrawn from current consideration. Claims 1, 3, 6, 7, 8, 10, and 13 are being amended to more particularly point out and distinctly claim the invention. Clear support can be found, for example, at least in Figures 3, 7, 8A, 9A, and 9B and the description thereof in the Specification. The Specification is being amended to add the specific reference to the PCT International Application. Specific terminology with respect to the description of Figures 9A and 9B is being changed. No new matter is being added.

The Office Action has required that a paragraph be added to the beginning of the application referring to the parent PCT application and the Japanese priority application. The Specification is being so amended.

The Office Action also contended that the Information Disclosure Statement filed with the application on November 29, 2004 failed to comply with the Rules. The Examiner has apparently overlooked MPEP 609.03 which specifically refers to the situation of a National Stage filing. It is not required that copies of the references or explanations of the relevance thereof be given. It is merely required to point out to the Examiner the International Search Report. WIPO should have sent copies of the references to the USPTO.

The Office Action objected to the drawings because a particular limitation that he found in claim 1 was not shown in the drawings. This was a result of a typographical error in claim 1 which is corrected above.

In addition, the Office Action has required that Figure 11 should be designated with a legend "Prior Art". Attached hereto is a replacement sheet of drawings showing Figure 11 with the legend "Prior Art".

The Office Action rejected claim 13 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Despite the disclosure on page 11 on the Specification, the Office Action is contending that the Specification does not enable for an adhesive or the combination of an adhesive and resin to be filled into the concave portion. Claim 13 has been amended. It is requested that this rejection be withdrawn.

The Office Action has rejected claims 1, 3, 6-8 and 13 under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner had certain specific objections and difficulties with claims 1, 3 and 6. These are addressed above together with certain other informalities which were found upon review. While we believe we are not changing the degree of limitation with respect to the invention, we are rearranging the language of the claims and we are changing the nomenclature of parts, particularly for the structure claimed in claim 6. Amendments are being made to the Specification to conform the language of the Specification to the language for claim 6.

Claims 1, 3, 6-8, 10 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,591,093 to Asai et al. (hereinafter Asai) taken in view of U.S. Patent 2,198,135 to Strasburg et al. (hereinafter Strasburg) and further in view

of European Publication 0013129 to Tresselt et al. (hereinafter Tresselt). The Examiner has provided the manner in which he is applying the references. The Examiner admits that Asai does not disclose an annular inertia mass element fixed in the concave portion wherein the inertia mass element is comprised of a laminate of annular plates formed by arc-shaped ring pieces bonded in a circumferential direction and a thickness direction. The Examiner is primarily relying on Figure 7 of Asai. Any reapplication of these rejections to the claims as amended above would be respectfully traversed.

Claim 1 is directed to a torsional damper pulley comprising certain specific structure. A hub is fixed at a revolving shaft of an internal combustion engine. A rectangular cross-section, annular pulley body is coaxially placed outside said hub in a radial direction, and has a pulley groove at an outer circumferential portion and a predetermined inertia mass. An elastic solid is interposed between an outer circumferential surface of said hub and an inner circumferential surface of said pulley body. The pulley body comprises an annular metallic frame having a U-shaped cross-section defining a concave portion open in an axial direction of the pulley with the pulley groove being provided at an outer circumferential portion thereof. The predetermined inertial mass comprises an annular inertia mass element fixed in the concave portion. The inertia mass element is comprised of a laminate of annular plates formed of plural arc-shaped ring pieces bonded in a circumferential direction and a thickness direction thereof. The plural arc-shaped pieces each comprise connecting means for connecting with adjoining plural arc-shaped ring pieces, the connecting means being a part of the ring piece.

Asai does appear to have the structure as stated in the Office Action.

Strasburg discloses an engine vibration eliminator which contains within a chamber 3 a plurality of segmental weights 10 of any suitable metal separated from each other by a plurality of resilient spacers 11. The spacers also separate the weights from the outermost and innermost cylindrical surfaces 4 and 5, respectively. The spacers also perform the function of biasing the weight segments in the circumferential direction to hold the spacers apart from each other with a certain particular force. Other than the compression of the spacers, there is no teaching or suggestion in the reference of any particular bonding or permanent connection of the spacers, weights, or the concave portion. Further, there is clearly no teaching of annular plates formed of a laminate of arc-shaped ring pieces.

Tresselt discloses a viscous vibration damper comprising a series of stacked welded discs 40, 42, 44 with the discs 44 having dimples 66 all stacked at the same position on each plate. The discs are formed by a suitable means such as a punch press with the dimples being similarly formed. After the discs are stacked together and aligned using the dimples, they are clamped and welded together. Each of the discs is a perfect complete round annular plate. There is no teaching or suggestion of making a disc out of ring-shaped pieces.

There is no apparent motivation for changing the structure of Strasburg to be anything remotely similar to Tresselt, nor is there any teaching or motivation to take the teachings of Tresselt and make each one of the plates out of ring-shaped pieces. The axial concentricity in Strasburg is performed by the provision of the uniform spacers. The Examiner's argument that using the structure of Tresselt would result in a device that has simple parts is not supported in the record since the number of parts and

shape of the parts in Strasburg are also simple. The Examiner has provided no reason other than the present application to choose between which part of which one of the secondary references would be used.

In addition, there is no teaching or suggestion in either one of the references of the specific subject matter of claim 3, nor the subject matter of claims 6 or 7. The dimples in Tresselt are not provided for bonding the plates together. Rather, Tresselt relies on welding to do so, which is an additional step in construction. Further, there is no teaching or suggestion that each tooth is formed to be circumferentially narrower than the corresponding dimple.

With respect to claim 10, there is no teaching or suggestion that the annular plate has an outer diameter in pressure-contact with the inner surface of an outer circumferential wall defining the concave portion of the pulley body and that the inertia mass element is fixed by being press-fitted into the concave portion. In Tresselt, the discs welded together are free floating within the container. In Strasburg, the segments are held in place by the spacers. There is no teaching or suggestion of press-fitting anything to anything else. Further, with respect to claim 13, there certainly is no teaching or suggestion of filling a resin into the concave portion of the pulley body after the inertia mass element is inserted.

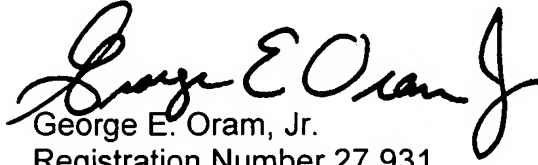
Certain clear differences exist between the present invention as claimed and the prior art relied upon by the Examiner. It is respectfully submitted that these differences are more than sufficient that the present invention as claimed would not have been rendered obvious viewing the prior art.

It is respectfully requested that these rejections be withdrawn and that Claims 1, 3, 6 – 8, 10, and 13 be indicated as allowable. Since Claims 1, 3, 6 – 8 and 13 remain generic, it is further requested that Claims 9, 11, 12, and 15 be brought back into the application and also allowed. An early Notice of Allowance is requested.

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number 101136-00120.

Respectfully submitted,


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Enclosure: Replacement Drawing Sheet – Figures 10 and 11